

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) An apparatus for fabricating a three-dimensional object from a representation of the object stored in memory, the apparatus comprising:
a rotary annular build drum table for receiving successive layers of a build material therein; and
an array of at least one printhead disposed above the annular build drum table, wherein the at least one printhead is configured for selectively dispensing droplets of a liquid binder onto the build material.
2. (Currently amended) The apparatus of claim 1, wherein the rotary annular build drum table rotates continuously.
3. (Currently amended) The apparatus of claim 1 further comprising a build material delivery system comprising:
a storage means for holding the build material; and
a conveying means for delivering the build material to the annular build drum table.
4. (Currently amended) The apparatus of claim 3 further comprising:
at least two storage chambers for holding at least two build material components separate from each other; and
a blender for mixing the build material components in a predetermined ratio prior to [[for]] delivery to the annular build drum table.
5. (Currently amended) The apparatus of claim 1 further comprising a spreader for distributing the build material over at least a portion of the annular build drum table.
6. (Original) The apparatus of claim 5, wherein the spreader comprises a counter-rotating roller.

7. (Currently amended) The apparatus of claim 6, wherein the counter-rotating roller is skewed with respect to a radius of the rotary annular build drum ~~table~~ to induce excess build material to migrate over an inner edge of the annular build drum ~~table~~.
8. (Currently amended) The apparatus of claim 7 further comprising a sensor disposed below the inner edge of the annular build drum ~~table~~ to detect an amount of the excess build material.
9. (Currently amended) The apparatus of claim 8, wherein an amount of build material delivered to the annular build drum ~~table~~ is adjusted in response to the amount of excess build material detected.
10. (Currently amended) The apparatus of claim 1, wherein the array ~~prints~~ is configured to dispense droplets of the liquid binder over an entire surface of the annular build drum ~~table~~ by continuous consecutive radial scanning motions of the at least one printhead.
11. (Currently amended) The apparatus of claim 1, wherein the array is configured to dispense droplets of the liquid binder ~~fluid~~ at substantially any radial location of the rotary annular build drum ~~table~~ without adjustment.
12. (Original) The apparatus of claim 11, wherein the array can be adjusted incrementally radially.
13. (Original) The apparatus of claim 1, wherein the array can be displaced from a normal printing position for servicing.
14. (Currently amended) The apparatus of claim 13, wherein the array can be displaced radially with respect to the rotary annular build drum ~~table~~.
15. (Original) The apparatus of claim 1, wherein the array includes redundant printheads.
16. (Original) The apparatus of claim 1, wherein the apparatus defines an opening for removing the three-dimensional object.
17. (Currently amended) The apparatus of claim 16, wherein the three-dimensional object is removed through at least one of a bottom opening and a side ~~top~~ opening of the annular build drum ~~table~~.

18. (Currently amended) The apparatus of claim 1 further comprising a sensor to monitor at least one performance characteristic of the apparatus, wherein the characteristic is selected from the group consisting of print quality, printing errors, print speed, printhead condition, ~~build material quantity~~, and drum table position.

19. (Original) The apparatus of claim 18, wherein operation of the apparatus is modified in response to a signal received from the sensor.

20. (Original) The apparatus of claim 19, wherein the array is movable in response to the signal from the sensor.

21. (Currently amended) The apparatus of claim 1 further comprising a plurality of rotary annular ~~build drums~~ table.

22. (Currently amended) An apparatus for fabricating a three-dimensional object from a representation of the object stored in memory, the apparatus comprising:

an annular ~~generally-circular~~ ~~build drum~~ table for receiving successive layers of a build material therein; and

an array of at least one printhead disposed above the annular ~~build drum~~ table and movable relative to the annular ~~build drum~~ table wherein the at least one printhead is configured for selectively dispensing droplets of a liquid binder onto the build material.

23. (Currently amended) The apparatus of claim 22, wherein the array is movable over at least a portion of a build surface defined by the annular ~~generally-circular~~ ~~build drum~~ table.

24. (Currently amended) The apparatus of claim 22, wherein the array is configured to dispense droplets of the liquid binder ~~fluid~~ at substantially any radial location of the annular ~~build drum~~ table by moving the array radially to a [[the]] desired location.

25. (Currently amended) The apparatus of claim 22, wherein the array moves continuously about the annular ~~build drum~~ table.

26. (Currently amended) The apparatus of claim 22, wherein the annular ~~generally-circular~~ ~~build drum~~ table is movable in a vertical direction.

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